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MR. PATRICK GALLAGHER: Good evening. My name is Patrick Gallagher. I am from Des Plaines, Illinois. I have a degree in nuclear chemistry and nuclear pharmacy.

I originally came to this meeting with no prepared remarks, considering that I was just interested in the transport of this material through the City of Chicago. Certain topics that were bought up
1 in the preliminary presentations here brought me to this point where I would like to ask a question of the materials engineers concerning their design of the final encasement of the products.

They're encasing these centered fuel elements in a multi -- an engineered multilevel metal container, and they have already said that they are producing radioactive gases inside this system that is leakproof. It will also produce helium gas as part of the radioactive decay processes.

I anticipate that there will be a significant increase in the pressure inside these vessels and the radiation that is produced from the decay of these products, both beta decay and alpha decay, will cause embrittlement internally. And because they are alpha emitters, the material will undergo alpha creep through the fractures and the gas will enhance the fracturing process over several years.

My question is, to the DOE is, what is the overpressuring that will develop inside these vessels, and with cooling, will that produce the possibility of the fracturing process? And since they are not vented, is there a possibility of helium gas causing the fissioning of the uranium and plutonium that are inside these fuel pellets?

Thank you.